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United States Patent [19][11] **Patent Number:** **5,994,455****Mück et al.**[45] **Date of Patent:** **Nov. 30, 1999**

[54] **PROCESS FOR THE PREPARATION OF
THERMALLY STABLE
POLYOXYMETHYLENE COPOLYMERS**

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528/242; 528/244; 528/248; 528/249; 528/250;
524/701; 524/706; 524/713; 524/730; 524/792**

[58] **Field of Search** **528/232, 241,
528/242, 244, 248, 249, 250; 524/701,
706, 713, 730, 745**

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,144,005 9/1992 Sextro et al. 528/480

FOREIGN PATENT DOCUMENTS

6-92475 8/1992 Japan .

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[57] **ABSTRACT**

A process for the preparation of polyoxymethylene copolymers, wherein 1,3,5-trioxane is polymerized with generally known comonomers in the presence of a strong protonic acid initiator and in the presence of a formaldehyde dialkyl acetal, and wherein the initiator is dissolved in the formaldehyde dialkyl acetal before admixing to the trioxane and the comonomers.

8 Claims, No Drawings

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